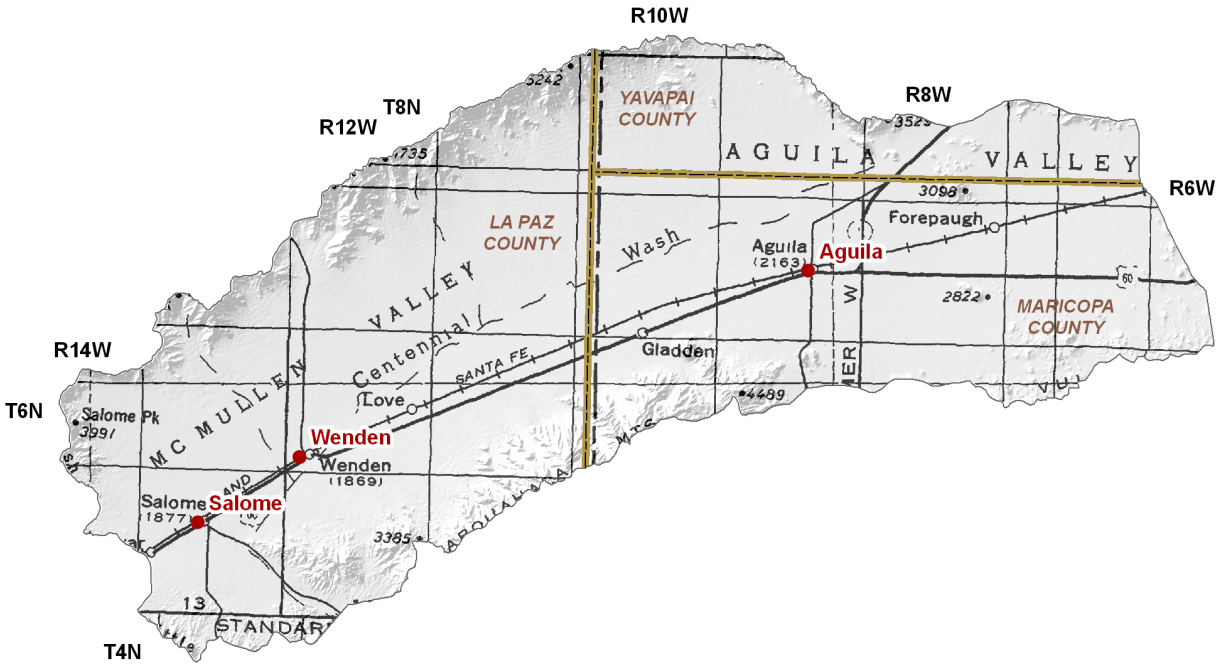
Section 7.5
McMullen Valley Basin

7.5.1 Geography of the McMullen Valley Basin

The McMullen Valley Basin, located in the northeastern part of the planning area, is 649 square miles in area. Geographic features and principal communities are shown on Figure 7.5-1. The basin is characterized by two valleys bordered by mountain ranges. Vegetation types include Lower Colorado River Valley and Arizona Uplands Sonoran desertscrub with small amounts of southwestern interior chaparral and semi-desert grassland. (See Figure 7.0-7)

- Principal geographic features shown on Figure 7.5-1 are:
    - Basin communities of Aguila, Salome and Wenden
    - Centennial Wash running east to west through the center of the basin
    - McMullen Valley in the western portion of the basin and Aguila Valley in the eastern portion of the basin
    - Harquahala Mountains along the southern basin boundary
    - The lowest point in the basin at approximately 1,680 feet where Centennial Wash exits the basin southeast of Salome
- Not well shown on Figure 7.5-1 are the Harcuvar Mountains on the northern basin boundary with the highest point in the basin at 5,242 feet.



Base Map: USGS 1:500,000, 1981

0 3 6 Miles

COUNTY
City, Town or Place

Figure 7.5-1
McMullen Valley Basin
Geographic Features

7.5.2 Land Ownership in the McMullen Valley Basin

Land ownership, including the percentage of ownership by category, for the McMullen Valley Basin is shown in Figure 7.5-2. The principal feature of land ownership in this basin is the limited number of land ownership types. A description of land ownership data sources and methods is found in Volume 1, Section 1.3.8. Land ownership categories are discussed below in the order of largest to smallest percentage in the basin.

U.S. Bureau of Land Management (BLM)

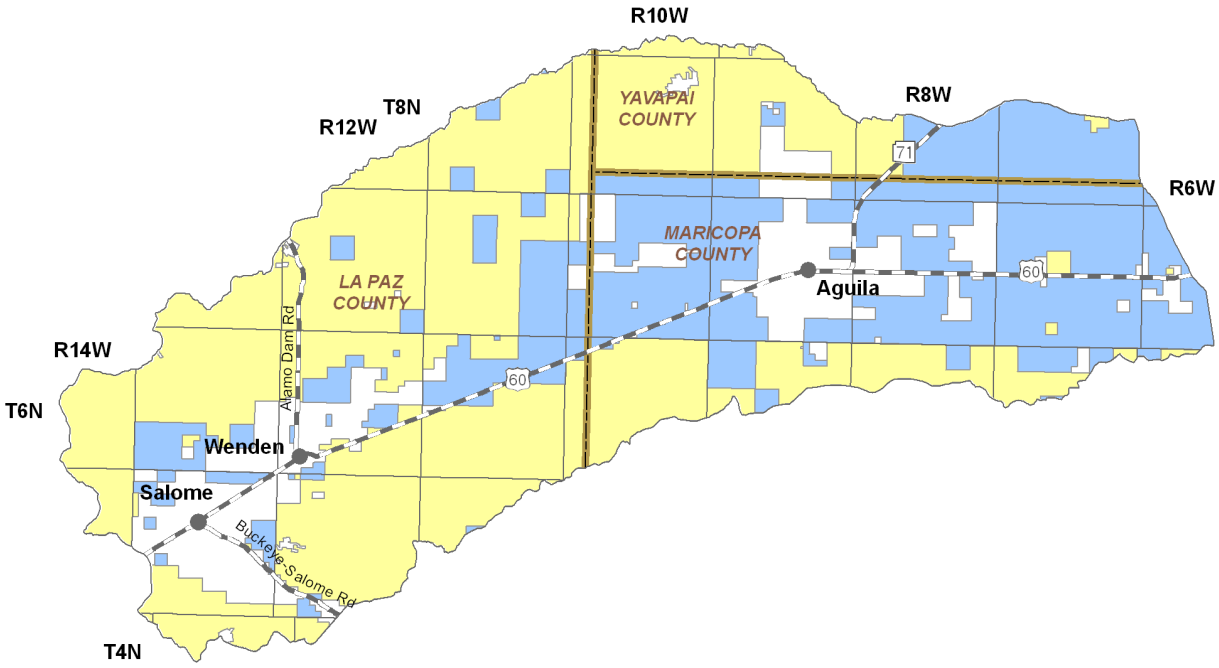
- 51.8% of the land is federally owned and managed by the Yuma Field Office of the Bureau of Land Management.
- This basin contains 9,000 acres of the 23,000 acre Harquahala Mountains Wilderness and 14,000 acres of the 25,000 acre Harcuvar Mountains Wilderness. (See Figure 7.0-9)
- Land uses include grazing, resource conservation and recreation.

State Trust Land

- 33.4% of the land is held in trust for the public schools under the State Trust Land system.
- Land uses include agriculture and grazing.

Private

- 14.8% of the land is private.
- Land uses include agriculture, domestic and commercial.



Source: ALRIS, 2004

0 3 6 Miles

Land Ownership (Percentage in Basin)

U.S. Bureau of Land Management (51.8%)
State Trust (33.4%)
Private (14.8%)

COUNTY
Major Road
City, Town or Place

Figure 7.5-2
McMullen Valley Basin
Land Ownership

7.5.3 Climate of the McMullen Valley Basin

Climate data from NOAA/NWS Co-op Network and AZMET stations are complied in Table 7.5-1 and the locations are shown on Figure 7.5-3. Figure 7.5-3 also shows precipitation contour data from the Spatial Climate Analysis Service (SCAS) at Oregon State University. The McMullen Valley Basin does not contain Evaporation Pan or SNOTEL/Snowcourse stations. A description of the climate data sources and methods is found in Volume 1, Section 1.3.3.

NOAA/NWS Co-op Network

- Refer to Table 7.5-1A
- Temperatures at the two NOAA/NWS Co-op Network stations in the basin range from an average high of 88.1°F at Salome 6 SE to an average low of 47.6°F at Aguila.
- Average seasonal rainfall follows a bi-modal pattern with approximately one-third of the average seasonal rainfall occurring in the winter (January-March) season and one-third in the summer (July-September) season. The highest average annual rainfall in the basin is 8.30 inches at the Aguila station.

AZMET

- Refer to Table 7.5-1C
- There is one AZMET station in the basin, Aguila. This station is at 2,149 feet and has an annual evaporation rate of 84.38 inches.

SCAS Precipitation Data

- See Figure 7.5-3
- Additional precipitation data shows average annual rainfall as high as 18 inches in the Harcuvar Mountains along the northern basin boundary and as low as eight inches in the middle of the basin.

Table 7.5-1 Climate Data for the McMullen Valley Basin

A. NOAA/NWS Co-op Network:

Station Name	Elevation (in feet)	Period of Record Used for Averages	Average Temperature Range (in F)		Average Precipitation (in inches)				
			Max/Month	Min/Month	Winter	Spring	Summer	Fall	Annual
Aguila	2,170	1971-2000	85.3/Jul	47.6/Dec	3.20	0.42	2.81	1.87	8.30
Salome 6 SE	1,700	1908-1957	88.1/Jul	48.5/Jan	2.53	0.52	3.09	1.75	7.87

Source: WRCC, 2003

B. Evaporation Pan:

Station Name	Elevation (in feet)	Period of Record Used for Averages	Avg. Annual Evap (in inches)
None			

Source: WRCC, 2003.

C. AZMET:

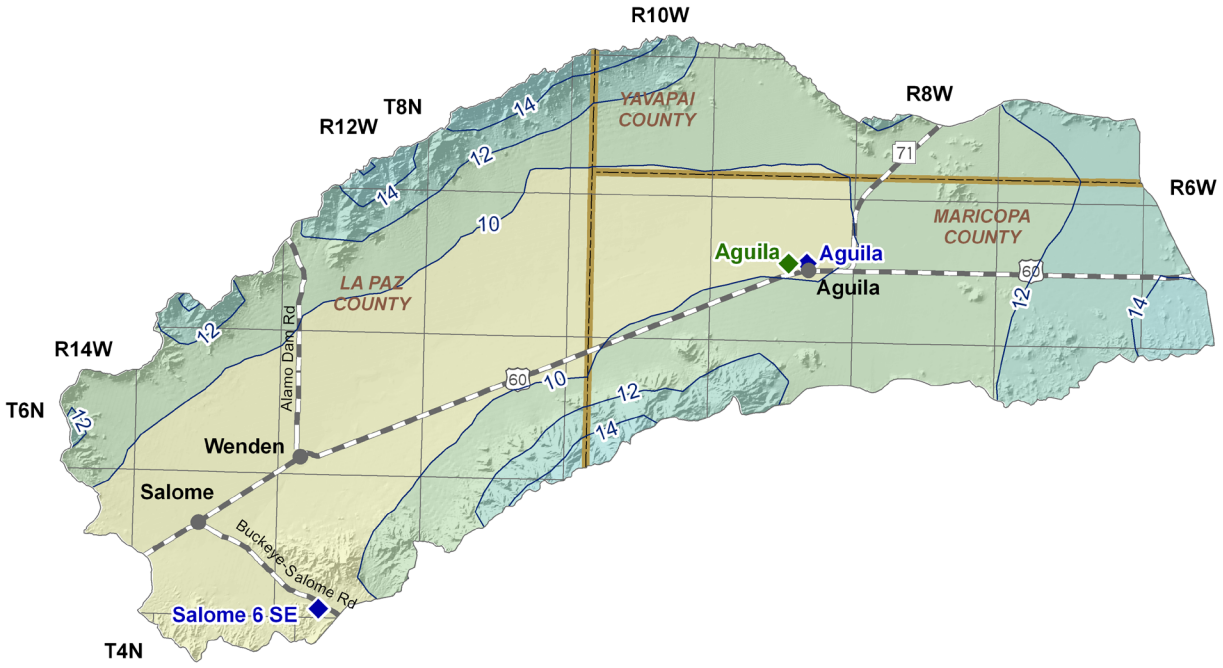
Station Name	Elevation (in feet)	Period of Record Used for Averages	Average Annual Reference Evaportranspiration, in inches (N*umber of years to calculate averages*)
Aguila	2,149	1987 - current	84.38 *(6)*

Source: Arizona Meteorological Network, 2005

D. SNOTEL/Snowcourse:

Station Name	Elevation (in feet)	Period of Record Used for Averages	Average Snowpack, at Beginning of the Month, as Inches Snow Water Content *(Number of measurements to calculate average)*					
			Jan.	Feb.	March	April	May	June
None								

Source: NRCS, 2005



Average Annual Precipitation (1961-1990)
inches per year

- 8-10
- 10-12
- 12-14
- 14-16
- 16-18

Meteorological Stations

- NOAA/NWS
- AZMET
- Precipitation Contour 12
- COUNTY
- Major Road
- City, Town or Place

0 3 6 Miles

N
S

Precipitation Data Source: Oregon State University, 1998

Figure 7.5-3
McMullen Valley Basin
Meteorological Stations
and Annual Precipitation

7.5.4 Surface Water Conditions in the McMullen Valley Basin

Flood ALERT equipment in the basin is shown in Table 7.5-3. Reservoir and stockpond data, including maximum storage or maximum surface area, are shown in Table 7.5-4. Flood ALERT equipment and USGS runoff contours are shown on Figure 7.5-4. There are no USGS streamflow gages in this basin. A description of stream data sources and methods is found in Volume 1, Section 1.3.16. A description of reservoir data sources and methods is found in Volume 1, Section 1.3.11. A description of stockpond data sources and methods is found in Volume 1, Section 1.3.15.

Flood ALERT Equipment

- Refer to Table 7.5-3.
- Most of the eight ALERT gages are located south of Centennial Wash.

Reservoirs and Stockponds

- Refer to Table 7.5-4.
- There are no large reservoirs in this basin.
- Surface water is stored or could be stored in two small reservoirs.
- There are 146 registered stockponds in this basin.

Runoff Contour

- Refer to Figure 7.5-4.
- Average annual runoff is highest, 0.2 inches per year or 10.66 acre-feet per square mile, in the easternmost portion of the basin and decreases to 0.1 inches, or five acre-feet per square mile, in the remainder of the basin.

Table 7.5-2 Streamflow Data for the McMullen Valley Basin

Station Number	USGS Station Name	Drainage Area (in mi^2)	Mean Basin Elevation (in feet)	Period of Record	Average Seasonal Flow (% of annual flow)				Annual Flow/Year (in acre-feet)				Years of Record
					Winter	Spring	Summer	Fall	Minimum	Median	Mean	Maximum	
None													

Sources: USGS NWIS, USGS 1998 and USGS 2003.

Table 7.5-3 Flood ALERT Equipment in the McMullen Valley Basin

Station ID	Station Name	Station Type	Install Date	Responsibility
5090	Centennial @ Wenden	Precipitation/Stage	9/2/1998	Maricopa Country FCD
5155	Grass Wash @ US 60	Precipitation	9/19/2001	Maricopa County FCD
5165	Outlaw Hill	Precipitation	5/13/2002	Maricopa County FCD
5170	Gladden	Precipitation	8/27/2002	Maricopa County FCD
5175	Centennial near Aguila	Precipitation/Stage	6/5/2001	Maricopa County FCD
5180	Centennial Wash	Precipitation	11/19/1981	Maricopa County FCD
5190	Smith Peak	Precipitation	5/1/1980	Maricopa County FCD
7140	Ritter Dam	Precipitation	11/21/2002	Maricopa County FCD

Notes:
FCD = Flood Control District

Table 7.5-4 Reservoirs and Stockponds in the McMullen Valley Basin

A. Large Reservoirs (500 acre-feet capacity and greater)

MAP KEY	RESERVOIR/LAKE NAME *(Name of dam, if different)*	OWNER/OPERATOR	MAXIMUM STORAGE (AF)	USE	JURISDICTION
None identified by ADWR at this time					

B. Other Large Reservoirs (50 acre surface area or greater)

MAP KEY	RESERVOIR/LAKE NAME *(Name of dam, if different)*	OWNER/OPERATOR	MAXIMUM SURFACE AREA (acres)	USE	JURISDICTION
None identified by ADWR at this time					

C. Small Reservoirs (greater than 15 acre-feet and less than 500 acre-feet capacity)

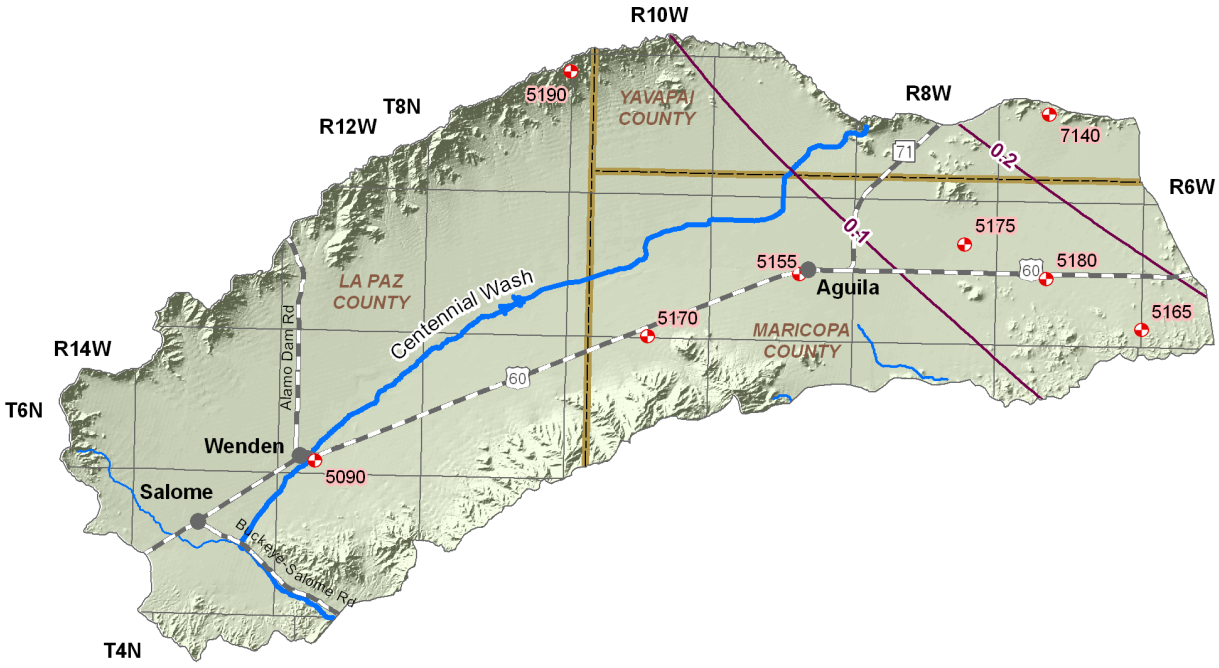
Total number: 1
Total maximum storage: 374 acre-feet

D. Other Small Reservoirs (between 5 and 50 acres surface area)

Total number: 1
Total surface area: 7 acres

E. Stockponds (up to 15 acre-feet capacity)

Total number: 146



Stream Data Source: ALRIS, 2005

0 3 6 Miles

Figure 7.5-4
McMullen Valley Basin
Surface Water Conditions

USGS Annual Runoff Contour for 1951-1980 (in inches)
Stream Channel (width of line reflects stream order)
Flood ALERT Equip. & Station ID
COUNTY
Major Road
City, Town or Place

7.5.5 Perennial/Intermittent Streams and Major Springs in the McMullen Valley Basin

The total number of springs in the basin are shown in Table 7.5-5. There are no perennial or intermittent streams and no major or minor springs in the McMullen Valley Basin. A description of data sources and methods for intermittent and perennial reaches is found in Volume 1, Section 1.3.16. A description of spring data sources and methods is found in Volume 1, Section 1.3.14.

- The total number of springs, regardless of discharge, identified by the USGS is two.

Table 7.5-5 Springs in the McMullen Valley Basin

A. Major Springs (10 gpm or greater):

Map Key	Name	Location		Discharge (in gpm)	Date Discharge Measured
		Latitude	Longitude		
None identified by ADWR at this time					

B. Minor Springs (1 to 10 gpm):

Name	Location		Discharge (in gpm)	Date Discharge Measured
	Latitude	Longitude		
None identified by ADWR at this time				

C. Total number of springs, regardless of discharge, identified by USGS (see ALRIS, 2005 and USGS, 2006): 2

7.5.6 Groundwater Conditions of the McMullen Valley Basin

Major aquifers, well yields, estimated water in storage, number of index wells and date of last water-level sweep are shown in Table 7.5-6. Figure 7.5-5 shows aquifer flow direction and water-level change between 1990-1991 and 2003-2004. Figure 7.5-6 contains hydrographs for selected wells shown on Figure 7.5-5. Figure 7.5-7 shows well yields in five yield categories. A description of aquifer data sources and methods is found in Volume 1, Section 1.3.2. A description of well data sources and methods, including water-level changes and well yields, is found in Volume 1, Section 1.3.19.

Major Aquifers

- Refer to Table 7.5-6 and Figure 7.5-5.
- The major aquifer in this basin is basin fill.
- Groundwater flow is toward two cones of depression, one in the Wenden/Salome area and the other in the Aguila area.

Well Yields

- Refer to Table 7.5-6 and Figure 7.5-7.
- As shown on Figure 7.5-6, well yields in this basin are generally between 1,000 and 2,000 gallons per minute (gpm).
- One source of well yield information, based on 167 reported wells, indicates that the median well yield is 1,500 gpm.

Natural Recharge

- Refer to Table 7.5-6.
- There are two estimates of natural recharge; both estimates indicate that natural recharge is 1,000 acre-feet per year.
- The only source of natural recharge is rainfall (ADWR 1994).

Water in Storage

- Refer to Table 7.5-6.
- There are three estimates of water in storage for this basin, two at 14 million acre-feet and the third at 15.1 million acre-feet, all to a depth of 1,200 feet.

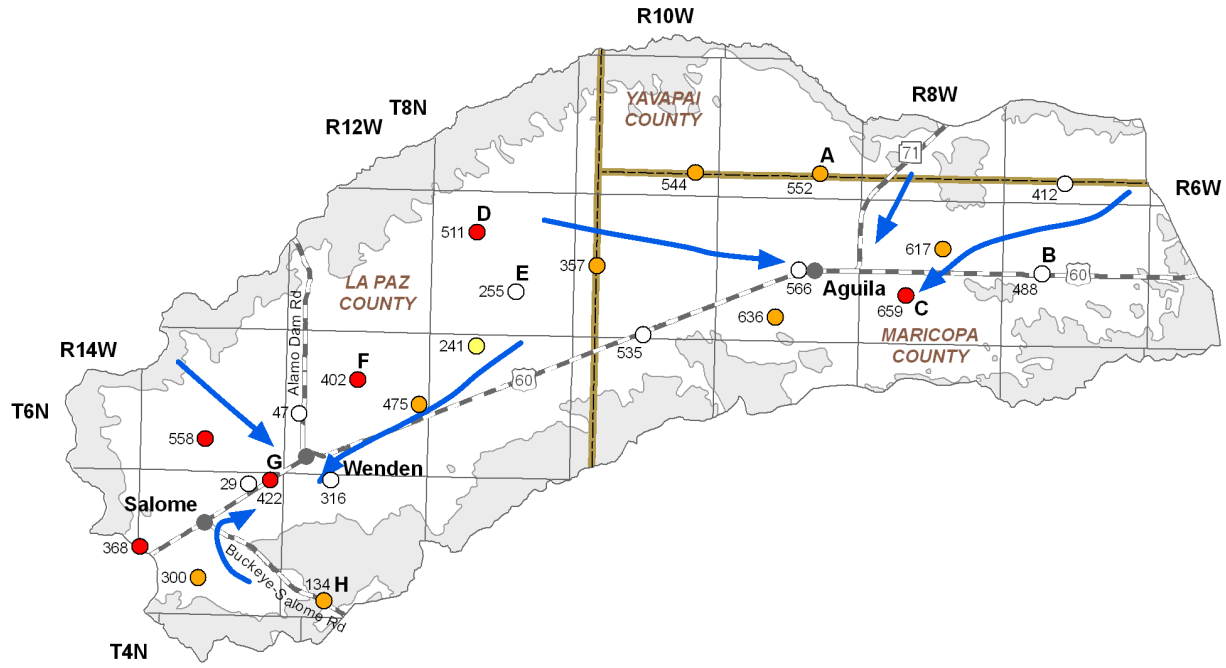
Water Level

- Refer to Figure 7.5-5. Water levels are shown for wells measured in 2003-2004.
- The Department annually measures 25 index wells in this basin; hydrographs for eight index wells are shown on Figure 7.5-6.
- The deepest water level shown on the map is 636 feet in the vicinity of Aguila and the shallowest is 29 feet west of Wenden.

Table 7.5-6 Groundwater Data for the McMullen Valley Basin

Basin Area, in square miles:	649	
Major Aquifer(s):	**Name and/or Geologic Units**	
	Basin Fill	
Well Yields, in gal/min:	Range 150-2,558 Median 1,132 (90 wells measured)	Measured by ADWR and/or USGS
	Range 9-3,500 Median 1,500 (167 wells reported)	Reported on registration forms for large (> 10-inch) diameter wells
	Range 150-3,500	ADWR (1994)
	Range 0-2,500	USGS (1994)
Estimated Natural Recharge, in acre-feet/year:	1,000	Freethey and Anderson (1986)
	1,000	Arizona Water Commission (1975)
Estimated Water Currently in Storage, in acre-feet:	15,100,000 (to 1,200 ft)	ADWR (1994)
	14,000,000[1] (to 1,200 ft)	Freethey and Anderson (1986)
	14,000,000 (to 1,200 ft)	Arizona Water Commission (1975)
Current Number of Index Wells:	25	
Date of Last Water-level Sweep:	2004 (114 wells measured)	

[1]Prevelopment Estimate



0 3 6 Miles

N

S

Figure 7.5-5
McMullen Valley Basin
Groundwater Conditions

Water-level change in feet between 1990-1991 and 2003-2004

375 H = number is depth to water in feet during 2003-2004; letter is hydrograph

- Greater than -30
- Between -30 and -15
- Between -15 and -1
- Change Data Not Available
- Generalized Flow Direction
- Consolidated Crystalline & Sedimentary Rocks
- Unconsolidated Sediments
- COUNTY
- Major Road
- City, Town or Place

Figure 7.5-6
McMullen Valley Basin
Hydrographs Showing Depth to Water in Selected Wells

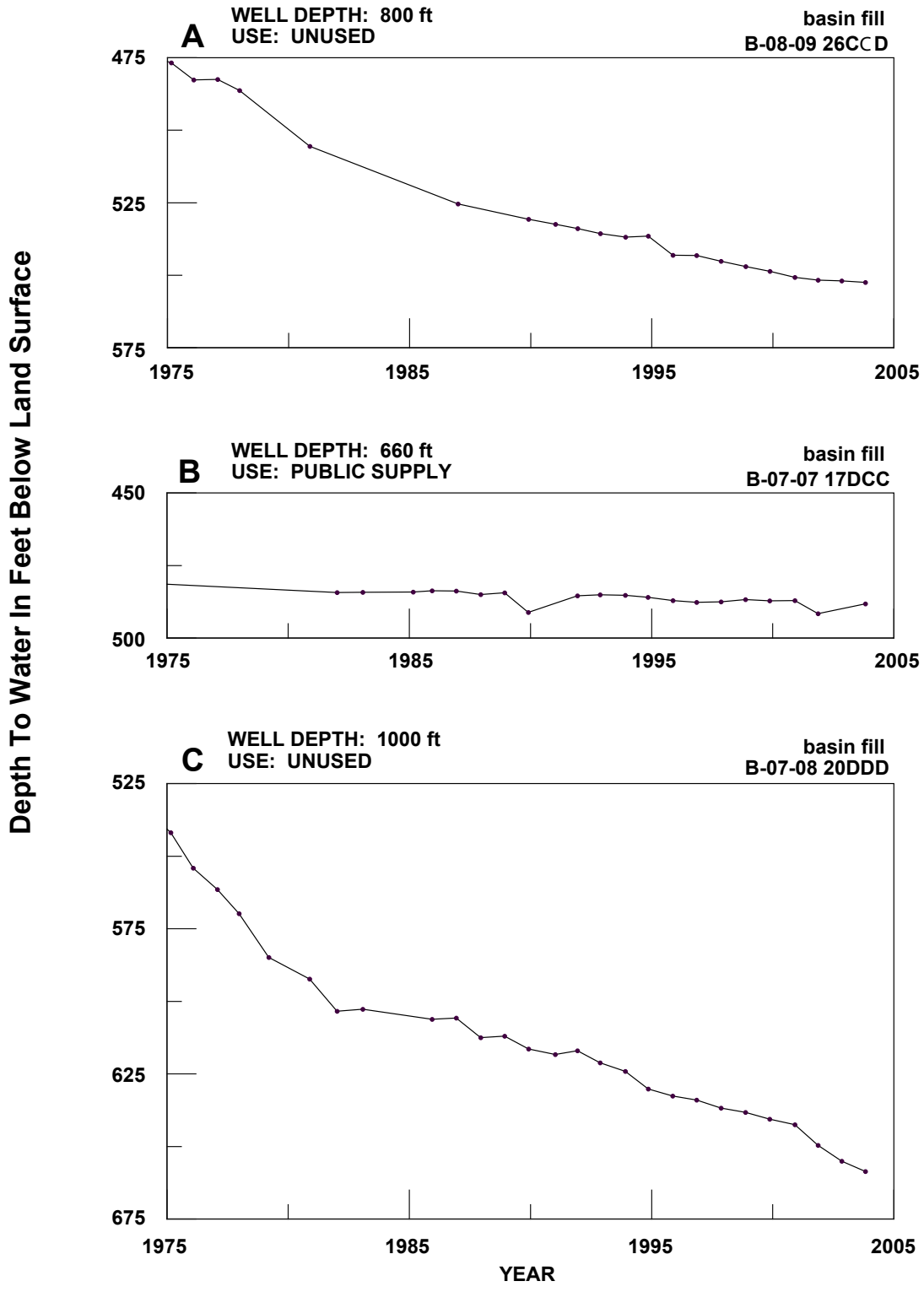


Figure 7.5-6 (cont'd)
McMullen Valley Basin
Hydrographs Showing Depth to Water in Selected Wells

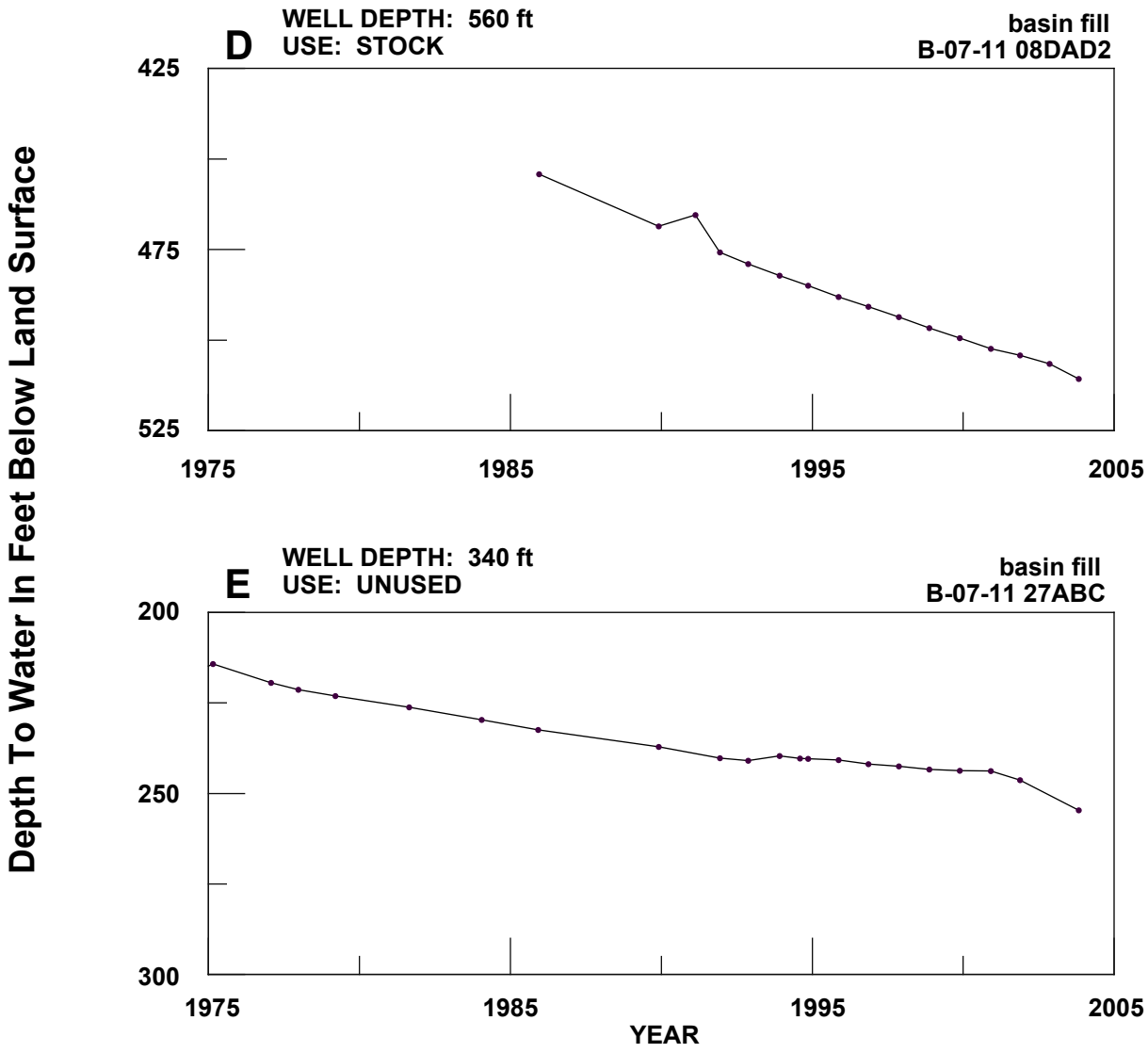


Figure 7.5-6 (cont'd)
McMullen Valley Basin
Hydrographs Showing Depth to Water in Selected Wells

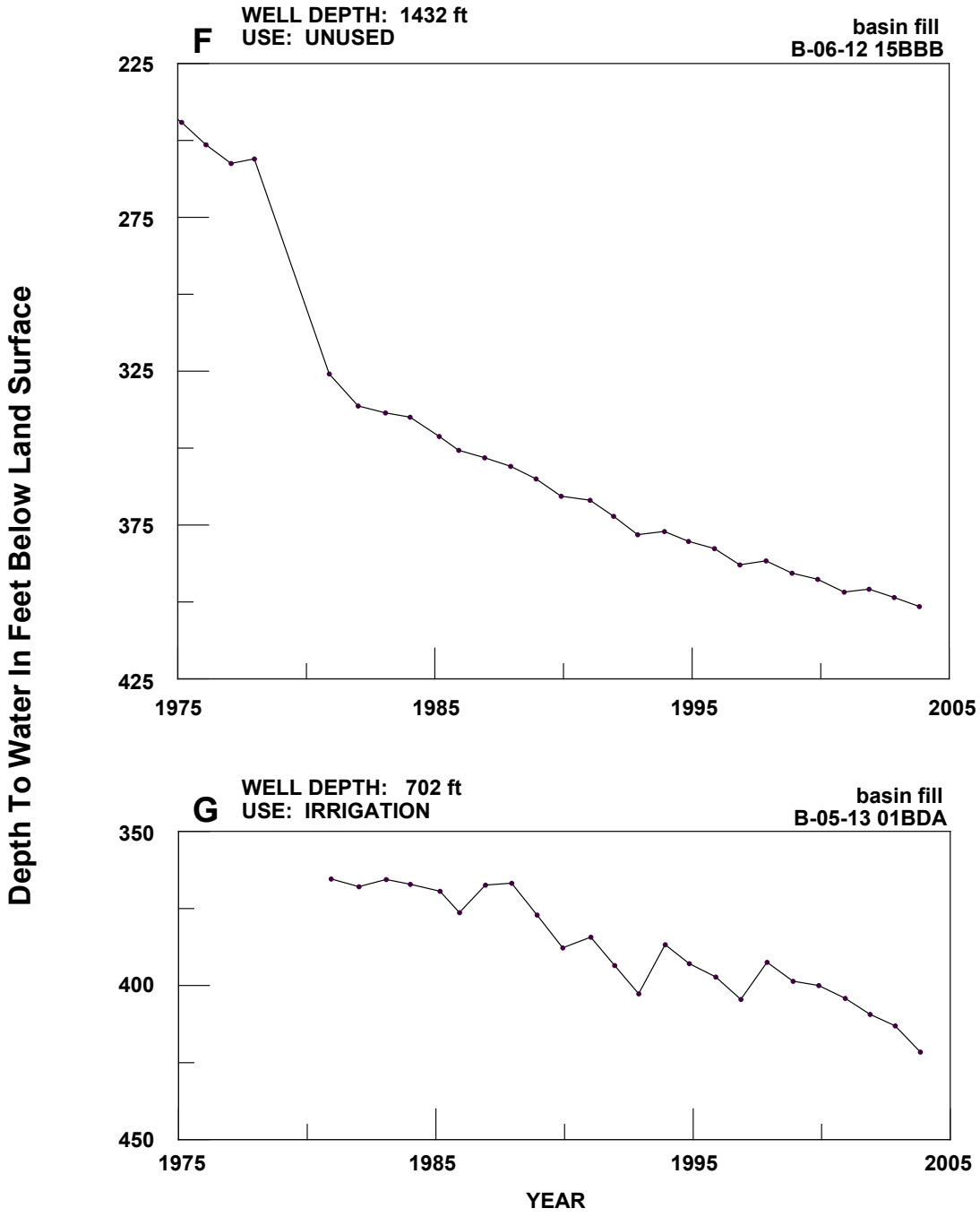
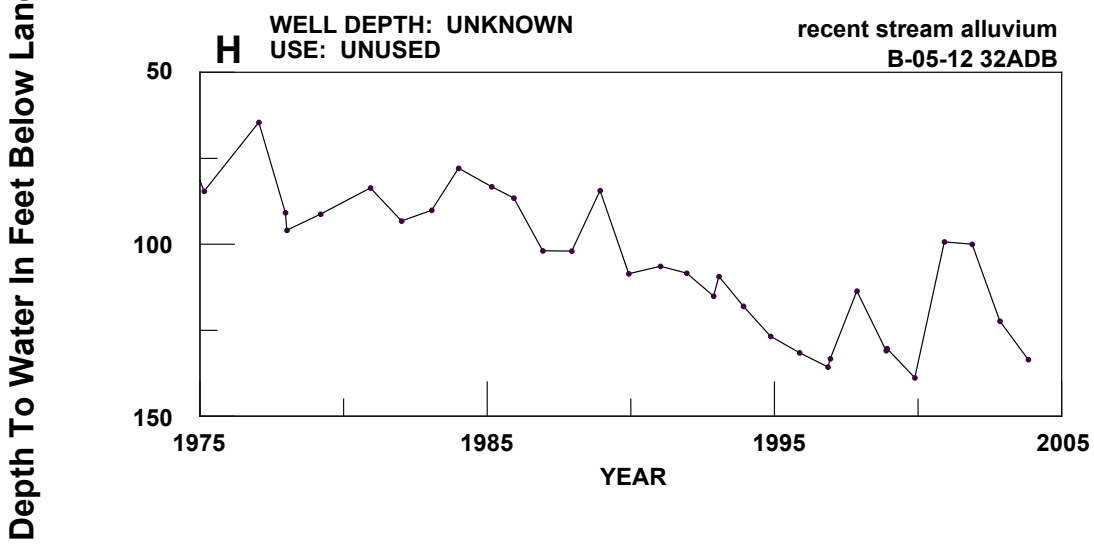
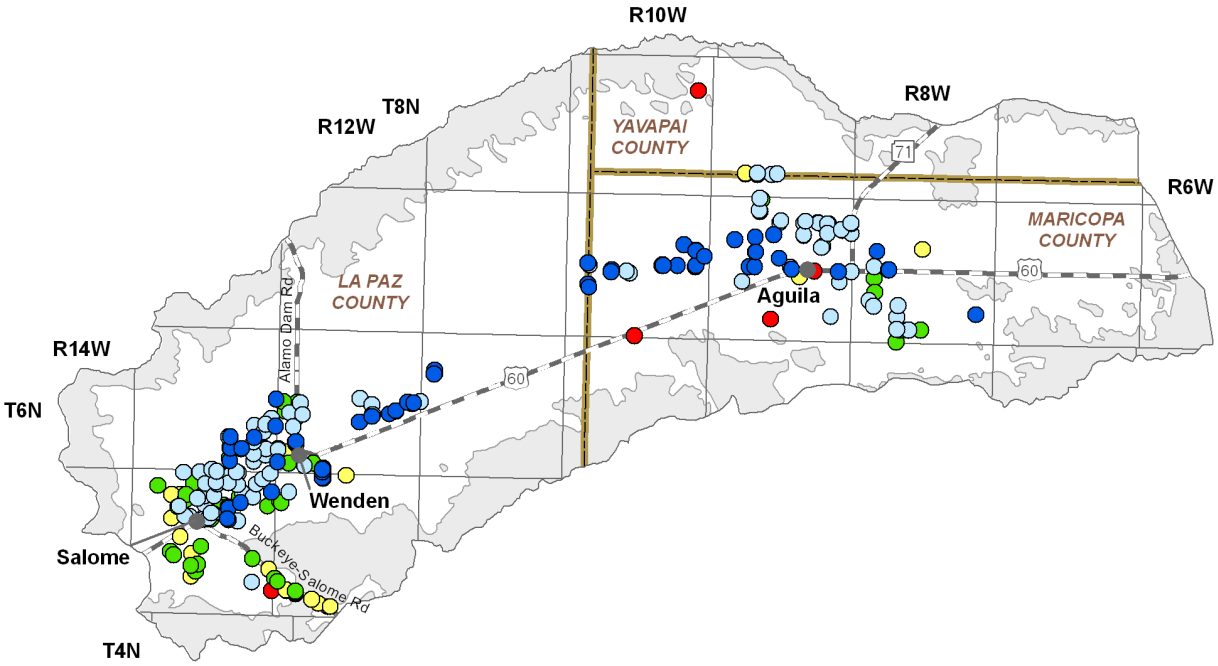


Figure 7.5-6 (cont'd)
McMullen Valley Basin
Hydrographs Showing Depth to Water in Selected Wells





0 3 6 Miles

N

S

Figure 7.5-7
McMullen Valley Basin
Well Yields

Well Yields
- Greater than 2000 gals/min
- Between 1000 and 2000 gals/min
- Between 500 and 1000 gals/min
- Between 100 and 500 gals/min
- Less than 100 gals/min

Consolidated Crystalline & Sedimentary Rocks

Unconsolidated Sediments

COUNTY

Major Road

City, Town or Place

7.5.7 Water Quality of the McMullen Valley Basin

Wells, springs and mine sites with parameter concentrations that have equaled or exceeded drinking water standard(s), including location and parameter(s) are shown in Table 7.5-7A. There are no impaired lakes or streams in this basin. Figure 7.5-8 shows the location of water quality occurrences keyed to Table 7.5-7. A description of water quality data sources and methods is found in Volume 1, Section 1.3.18. Not all parameters were measured at all sites; selective sampling for particular constituents is common.

Wells, Springs and Mine Sites

- Refer to Table 7.5-7A.
- Fifty-eight wells have parameter concentrations that have equaled or exceeded drinking water standards.
- Eighty-two percent of the wells equaled or exceeded the parameter for fluoride.
- Other parameters equaled or exceeded include arsenic, chromium, lead and nitrates.

Table 7.5-7 Water Quality Exceedences in the McMullen Valley Basin[1]

A. Wells, Springs and Mines

Map Key	Site Type	Site Location			Parameter(s) Concentration has Equaled or Exceeded Drinking Water Standard (DWS)[2]
		Township	Range	Section	
1	Well	8 South	9 West	32	As, F, Pb
2	Well	8 South	10 West	35	F
3	Well	7 South	7 West	17	F
4	Well	7 South	8 West	16	F
5	Well	7 South	8 West	17	F
6	Well	7 South	8 West	17	F
7	Well	7 South	8 West	17	F
8	Well	7 South	8 West	18	F
9	Well	7 South	8 West	30	As, F, Pb
10	Well	7 South	9 West	4	As, F, Pb
11	Well	7 South	9 West	11	NO3
12	Well	7 South	9 West	11	F
13	Well	7 South	9 West	12	F
14	Well	7 South	9 West	15	F
15	Well	7 South	9 West	25	F
16	Well	6 South	11 West	5	Cr
17	Well	6 South	11 West	7	F
18	Well	6 South	12 West	13	F
19	Well	6 South	12 West	13	F
20	Well	6 South	12 West	13	As, F
21	Well	6 South	12 West	19	F
22	Well	6 South	12 West	19	F
23	Well	6 South	12 West	20	F
24	Well	6 South	12 West	22	F
25	Well	6 South	12 West	22	F
26	Well	6 South	12 West	23	As, F
27	Well	6 South	12 West	23	As, F
28	Well	6 South	12 West	30	F
29	Well	6 South	12 West	30	F
30	Well	6 South	12 West	31	As, F
31	Well	6 South	12 West	31	F
32	Well	6 South	12 West	31	F
33	Well	6 South	12 West	31	As, F
34	Well	6 South	12 West	32	F
35	Well	6 South	12 West	32	F
36	Well	6 South	13 West	35	F
37	Well	6 South	13 West	36	F
38	Well	6 South	13 West	36	F
39	Well	6 South	13 West	36	F
40	Well	5 South	12 West	5	F
41	Well	5 South	12 West	35	F
42	Well	5 South	13 West	1	F
43	Well	5 South	13 West	1	F
44	Well	5 South	13 West	2	F
45	Well	5 South	13 West	2	F
46	Well	5 South	13 West	2	As, F, NO3
47	Well	5 South	13 West	10	NO3

Table 7.5-7 Water Quality Exceedences in the McMullen Valley Basin cont[1]

Map Key	Site Type	Site Location			Parameter(s) Concentration has Equaled or Exceeded Drinking Water Standard (DWS)[2]
		Township	Range	Section	
48	Well	5 South	13 West	10	As, F, NO3
49	Well	5 South	13 West	10	NO3
50	Well	5 South	13 West	10	NO3
51	Well	5 South	13 West	11	NO3
52	Well	5 South	13 West	11	NO3
53	Well	5 South	13 West	11	F, NO3
54	Well	5 South	13 West	12	F
55	Well	5 South	13 West	12	NO3
56	Well	5 South	13 West	12	F, TDS
57	Well	5 South	13 West	14	As, NO3
58	Well	5 South	13 West	14	NO3

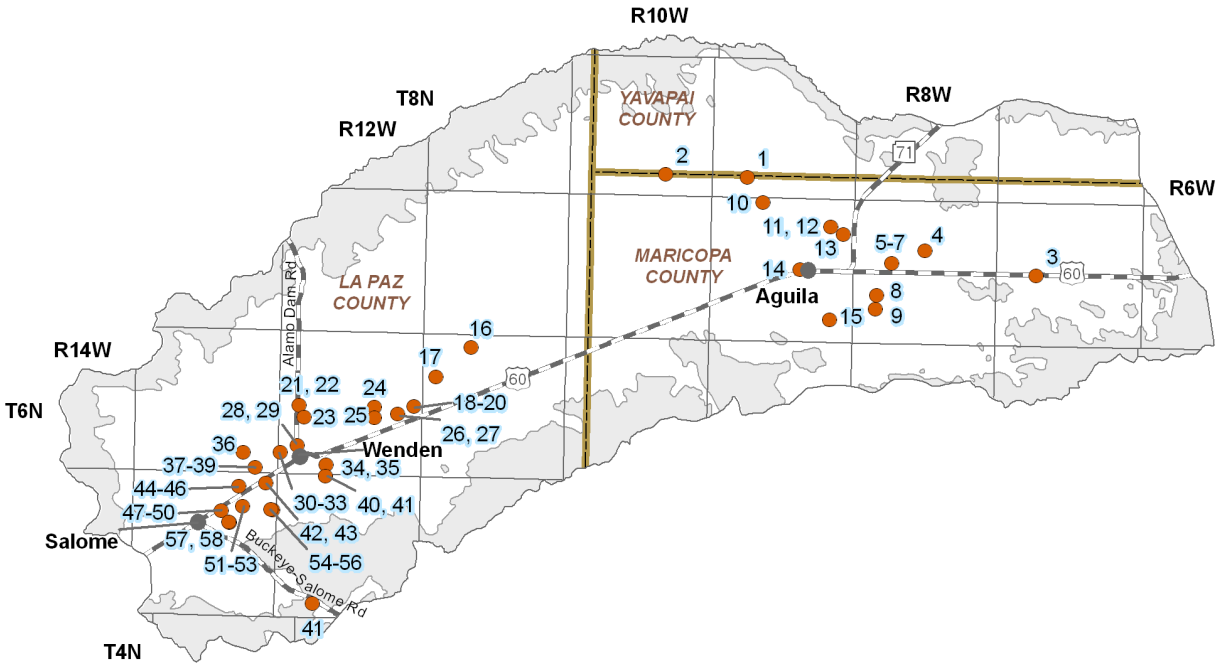
B. Lakes and Streams

Map Key	Site Type	Site Name	Length of Impaired Stream Reach (in miles)	Area of Impaired Lake (in acres)	Designated Use Standard	Parameter(s) Exceeding Use Standard
None identified by ADWR at this time						

Notes:

[1] Water quality samples collected between 1976 and 2001.

[2] As = Arsenic
Cr = Chromium
NO3 = Nitrate/ Nitrite
F = Fluoride
Pb = Lead



0 3 6 Miles

Well, Spring or Mine Site that has Equaled or Exceeded DWS 1
Consolidated Crystalline & Sedimentary Rocks
Unconsolidated Sediments
COUNTY
Major Road
City, Town or Place

Figure 7.5-8
McMullen Valley Basin
Water Quality Conditions

7.5.8 Cultural Water Demands in the McMullen Valley Basin

Cultural water demand data including population, number of wells and the average well pumpage and surface water diversions by the municipal, industrial and agricultural sectors are shown in Table 7.5-8. Figure 7.5-9 shows the location of demand centers. Effluent generation including facility ownership, location, population served and not served, volume treated, disposal method and treatment level is shown in Table 7.5-9. A description of cultural water demand data sources and methods is found in Volume 1, Section 1.3.5. More detailed information on cultural water demands is found in Section 7.0.7.

Cultural Water Demands

- Refer to Table 7.5-8 and Figure 7.5-9.
- Population in this basin increased from 280 in 1980 to 2,291 in 2000 and projections suggest the population will more than double by 2050.
- Most cultural water use is for irrigation located near Wenden/Salome and in the Aguila area.
- Groundwater use for agriculture increased 27% from 1991 to 2003.
- Both municipal and industrial groundwater demand are minimal in this basin. Municipal demand increased 20% from 1991 to 2003 and industrial demand remained the same.
- There is no reported surface water demand in this basin.
- As of 2003 there were 362 registered wells with a pumping capacity of less than or equal to 35 gallons per minute and 187 wells with a pumping capacity of more than 35 gallons per minute.

Effluent Generation

- Refer to Table 7.5-9.
- There is one wastewater treatment plant in this basin, Forepaugh WWTP, no other information was available on this facility.

Table 7.5-8 Cultural Water Demands in the McMullen Valley Basin[1]

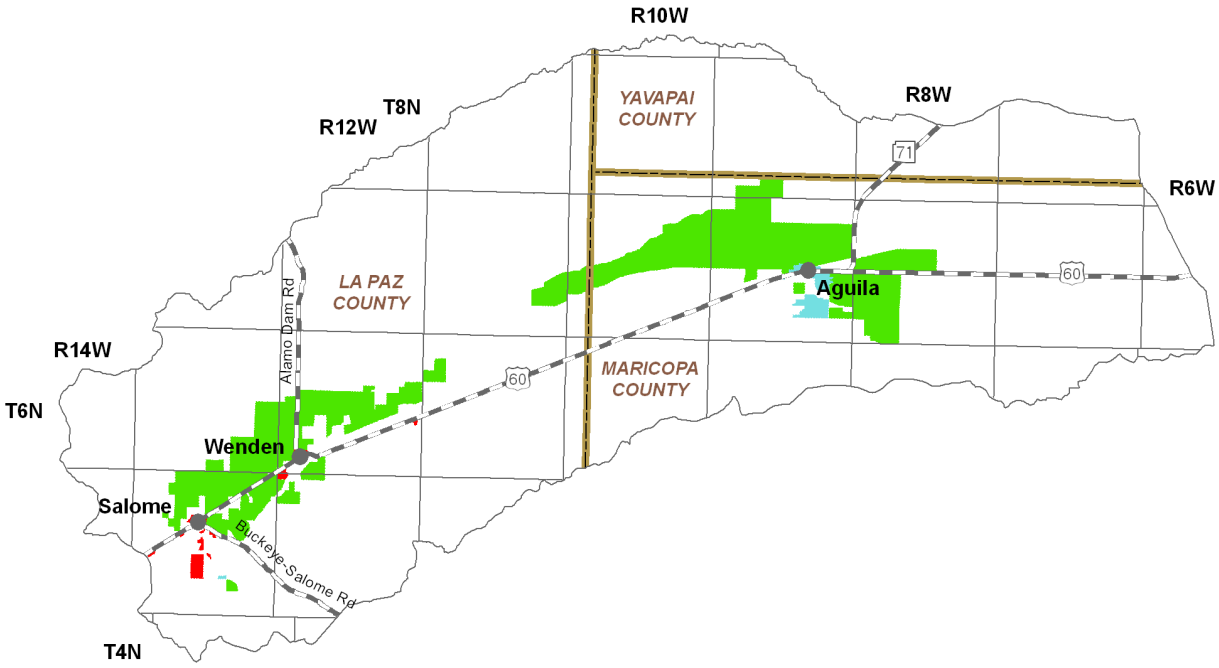
Year	Recent (Census) and Projected (DES) Population	Number of Registered Water Supply Wells Drilled		Average Annual Demand (in acre-feet)						Data Source
				Well Pumpage			Surface-Water Diversions			
		Q ≤ 35 gpm	Q > 35 gpm	Municipal	Industrial	Irrigation	Municipal	Industrial	Irrigation	
1971		127[2]	173[2]	120,000			NR			ADWR (1994)
1972										
1973										
1974										
1975										
1976				123,000			NR			
1977										
1978										
1979										
1980	280									
1981	395	27	9	94,000			NR			
1982	509									
1983	624									
1984	739									
1985	853									
1986	968	24	3	60,000			NR			
1987	1,083									
1988	1,197									
1989	1,312									
1990	1,427									
1991	1,513	38	1	450	<300	77,000	NR			USGS (2005)
1992	1,599									
1993	1,686									
1994	1,772									
1995	1,859									
1996	1,945	79	1	500	<300	79,500	NR			
1997	2,032									
1998	2,118									
1999	2,205									
2000	2,291									
2001	2,430	39	0	550	<300	98,000	NR			
2002	2,569									
2003	2,707									
2010	3,679									
2020	4,143									
2030	4,565									
2040	4,835									
2050	5,028									
ADDITIONAL WELLS:[3]		**28**								
WELL TOTALS:		**362**	**187**							

[1] Does not include evaporation losses from stockponds and reservoirs.
[2] Includes all wells through 1980.
[3] Other water-supply wells are listed in the ADWR Well Registry for this basin, but they do not have completion dates. These wells are summed here.
NR - Not reported

Table 7.5-9 Effluent Generation in the McMullen Valley Basin

Facility Name	Ownership	City/Location Served	Population Served	Volume Treated/Generated (acre-feet)	Disposal Method							Current Treatment Level	Population Not Served	Year of Record
					Water-course	Evaporation Pond	Irrigation	Golf Course	Wildlife Area	Discharged to another facility	Infiltration Basins			
Forepaugh WWTP	NA	Forepaugh	NA											

NA: Data not currently available to ADWR
WWTP: Waste Water Treatment Plant



Primary Data Source: USGS National Gap Analysis Program, 2004

0 3 6 Miles

Figure 7.5-9
McMullen Valley Basin
Cultural Water Demand

Demand Centers

- Agriculture
- M&I - High Intensity
- M&I - Low Intensity
- Small Mine / Quarry
- COUNTY
- Major Road
- City, Town or Place

7.5.9 Water Adequacy Determinations in the McMullen Valley Basin

Water adequacy determination information including the subdivision name, location, number of lots, adequacy determination, reason for an inadequacy determination, date of determination and subdivision water provider are shown in Table 7.5-10. Figure 7.5-10 shows the general locations of subdivisions (to the section level) keyed to the Table. A description of the Water Adequacy Program is found in Volume 1, Appendix A. Adequacy determination data sources and methods are found in Volume 1, Sections 1.3.1.

Water Adequacy Reports

- See Table 7.5-10
- As of May, 2005 nine subdivisions had been reviewed for an adequacy determination. All subdivisions are in La Paz County.
- Of the 2,030 lots in nine subdivisions, 1,904 lots or 94% were determined to be adequate.
- One determination of inadequacy was made due to water quality.

Table 7.5-10 Adequacy Determinations in the McMullen Valley Basin[1]

Map Key	Subdivision Name	County	Location			No. of Lots	ADWR File No.[2]	ADWR Adequacy Determination	Reason(s) for Inadequacy Determination[3]	Date of Determination	Water Provider at the Time of Application
			Township	Range	Section						
1	Desert Links	La Paz	5 North	13 West	21	430	22-401492	Adequate		1/12/05	Keaton Development Company
2	Indian Hills Airpark II	La Paz	5 North	13 West	21	126	22-400953	Inadequate	C	4/22/03	Keaton Development Company
3	Indian Hills Estates	La Paz	5 North	13 West	21	516		Adequate		8/17/87	Keaton Development Company
4	Keller Retirement Community	La Paz	5 North	13 West	21	31		Adequate		2/28/74	Keaton Water Company
5	Keller Retirement Community Unit 6	La Paz	5 North	13 West	28	233		Adequate		8/7/75	Keaton Water Company
6	Monroe Heights	La Paz	5 North	13 West	26	236	22-400388	Adequate		10/16/00	Salome Heights Development, LLC
7	Outback Acres	La Paz	5 North	13 West	27	55	22-400391	Adequate		10/17/00	Salome Heights Development, LLC
8	Salome Heights	La Paz	5 North	13 West	27	118	22-400390	Adequate		3/15/01	Dry Lot Subdivision
9	Western Sky Airpark	La Paz	5 North	13 West	17	285	22-401248	Adequate		3/31/04	Western Sky Airpark Water Improvement District

Notes:

[1] Each determination of the adequacy of water supplies available to a subdivision is based on the information available to ADWR and the standards of review and policies in effect at the time the determination was made. In some cases, ADWR might make a different determination if a similar application were submitted today, based on the hydrologic data and other information currently available, as well as current rules and policies.

[2] Prior to February 1995, ADWR did not assign file numbers to applications for adequacy determination.

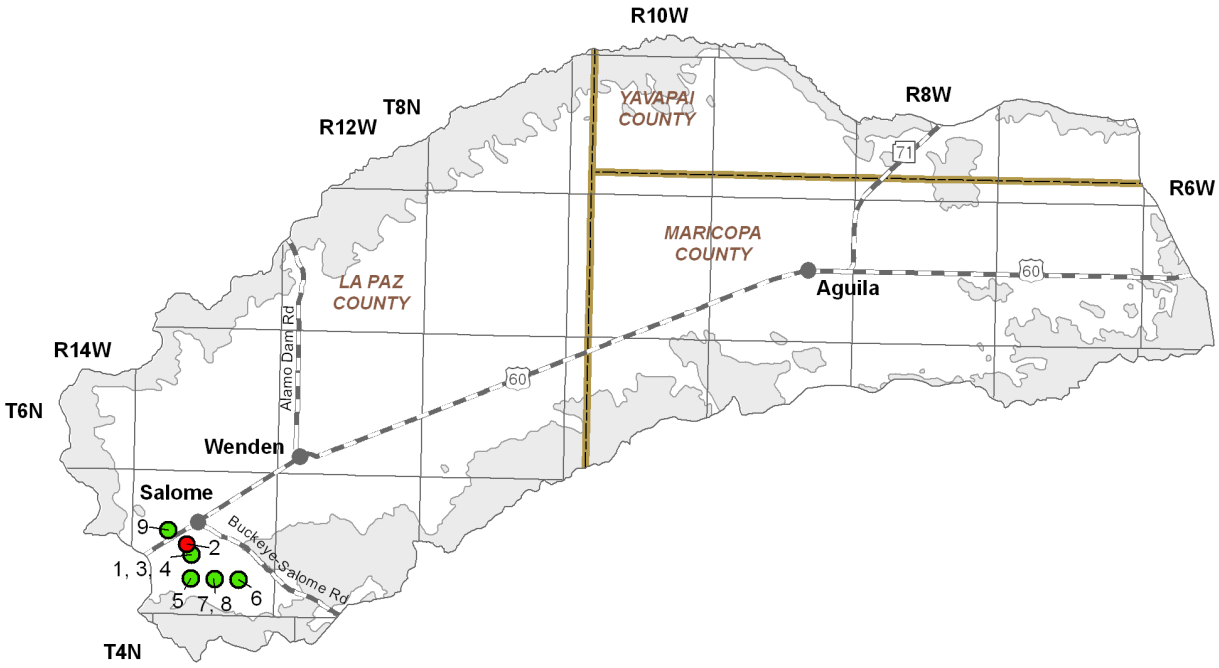
[3] A. Physical/Continuous

1) Insufficient Data (applicant chose not to submit necessary information, and/or available hydrologic data insufficient to make determination)
2) Insufficient Supply (existing water supply unreliable or physically unavailable; for groundwater, depth-to-water exceeds criteria)
3) Insufficient Infrastructure (distribution system is insufficient to meet demands or applicant proposed water hauling)

B. Legal (applicant failed to demonstrate a legal right to use the water or failed to demonstrate the provider's legal authority to serve the subdivision)

C. Water Quality

D. Unable to locate records



0 3 6 Miles

Adequacy Determinations

- Adequate
- Inadequate

Consolidated Crystalline & Sedimentary Rocks

Unconsolidated Sediments

COUNTY

Major Road

City, Town or Place

Figure 7.5-10
McMullen Valley Basin
Adequacy Determinations

McMullen Valley Basin
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